

IMPORTANT INFORMATION

#1

The power handling capabilities of the Model 380B T-R Switch are purely a function of the VSWR present on the feed line at its point of attachment to the T-R Switch. The following table illustrates maximum permissible transmitter input power when connected to an antenna or other load reflecting a VSWR of 1:1.

This table is presented for both 50-52 and 70-75 ohm feed lines assuming a maximum feed line voltage of 225 volts which is safely below the nominal peak breakdown voltage of the 6AH6 tube of approximately 300 volts.

	70-75	50-52
SSB peak average power input (70% output efficiency)	1000 watts	1400 watts
AM input power (100% modulated)	200 watts	300 watts
CW telegraphy input (80% output efficiency)	850 watts	1200 watts

Watts expressed above are based on unity VSWR (1:1). Power input should be reduced in proportion to the VSWR. (Example - 2:1 - reduce power 50%)

#2

TVI protection includes adequate filtering the AC line. In some cases, a small low pass filter in the receiver antenna line will be required.

#3

Intermodulation, caused by strong adjacent channel stations appearing as ghosts, may be corrected by using beam type antennas or sharply tuned antenna coupling circuits. Untuned, all band antennas will accentuate this condition.

#4

Transmitter must be tuned to receiver operating frequency.

#5

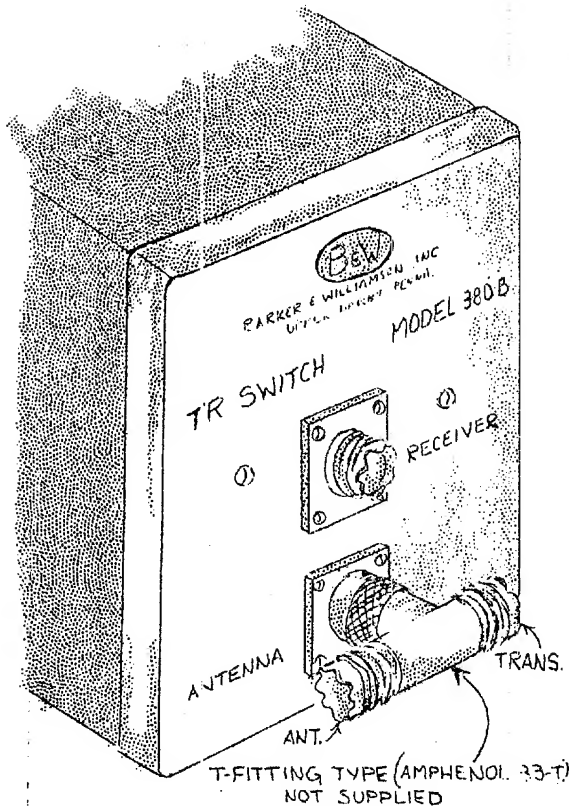
AC Modulation and excessive noise on received signals is caused by final amplifier acting as noise generator when allowed to idle with resting plate current. This condition can be corrected by providing complete cutoff bias during receiving cycle.

#6

Read QST, November 1955, Page 41.

STATINTL

T-R SWITCH
MODEL 380B



DESCRIPTION

The B&W Model 380B T-R Switch is a broadbanded electronic switch which permits the use of a single antenna for transmitting and receiving without the use of a conventional coaxial type relay or switch. Throughout the Amateur Bands 160 thru 10 meters, Antenna changeover is automatic and instantaneous.

Ideal for use on break-in CW, AM phone, and voice operated SSB. May be used with either 52 or 75 ohm coaxial line. Gain varying from 6 D.B. at 3.5 mc. to 0 D.B. at 30 mc. is to be realized on reception. Transmitting power in accordance with paragraph (1) on the reverse side of this sheet,

INSTALLATION INSTRUCTIONS

Installation of the Model 380B should be as close to the Transmitter output terminal as possible. When a Low Pass Filter is required for attenuation of harmonics causing Television Interference (TVI) it should be connected in the feed line circuit between the Model 380B and the Antenna, preferably as close to the Model 380B as conveniently possible. B&W Filters, Models 425 and 426 for 52 and 75 ohms respectively are recommended.

It is suggested that the 110 volt A.C. line, the T-R Switch be operated in conjunction with receiver A.C. line, since failure to energize unit permits almost no signal passage to the receiver. This is a "fail-safe" device; therefore, should the

unit not be energized or its vacuum tube fail, your transmitter will still be connected directly to the antenna, thus affording absolute protection to your transmitter. This unit is covered by Standard RETMA Warranty.

